Response to Office Action dated: July 11, 2005

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In the Claims:

Please amend Claims 1, 3, 11 and 13; cancel Claims 21-32; and add new Claims 33-44,

all as shown below. Applicant respectfully reserves the right to prosecute any originally presented

or canceled claims in a continuing or future application.

1. (Currently Amended) A collaboration hub for use with a collaboration system for handling

messages of conversations among participants, comprising:

a transport for receiving messages from participants and sending messages to other

participants using an extensible data protocol, wherein the extensible data protocol allows a

participant to specify both a routing information, and a business protocol, for that conversation,

wherein the routing information is specified by the participant in a header of the extensible data

protocol, and wherein the business protocol is specified by a uniform resource locator used by the

participant to communicate with the transport;

a decoder that decodes messages received from the participants;

a router that validates each message received from a participant at the transport, examines

the message routing information to determine which others participant or of the participants the

message should be delivered to, and stores the message for subsequent delivery via the transport

to those participants;

a scheduler that schedules the flow of messages from the transport to the router, and from

the router to the transport;

a manager that manages the flow of messages across components of collaboration hub;

[[and,]]

a repository that stores management data, wherein said management data is used by

components of the collaboration hub to handle said messages; and

wherein support for an additional business protocol can be plugged into the collaboration

hub, by specifying the uniform resource locator to be used with the additional business protocol,

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and the decoder that the additional business protocol will use to decode messages.

2. (Canceled).

Attorney Docket No.: BEAS-01033US4

spadala/beas/1033/1033us4/1033us4.ROA.07.11.05.wpd

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3. (Currently Amended) The collaboration hub of claim 1 further comprising a <u>plurality of</u>

decoders that can be used to decode decodes messages received from said participants, wherein

[[the]] each particular business protocol specifies which one or more of the plurality of decoders are

to be used with that particular business protocol decoder plugged between the transport and the

scheduler.

4. (Previously Amended) The collaboration hub of claim 1 further comprising an encoder that

encodes messages sent to other participants, wherein the encoder is plugged between the

scheduler and the transport.

5. (Previously Amended) The collaboration hub of claim 1 further comprising router logic plug-

ins that determine said other participants to whom messages should be sent, wherein the router

logic plug-ins are plugged between the scheduler and the router.

6. (Previously Amended) The collaboration hub of claim 1 further comprising filter logic plug-ins

that determine whether to send a message to said other participants, wherein the filter logic plug-ins

are plugged in between the router and the scheduler.

7. (Canceled).

8. (Previously Amended) The collaboration hub of claim 1 further comprising business logic

plug-ins that provide support for messages of various business protocols among the participants,

wherein said business logic plug-ins are plugged in between the scheduler and the router.

9. (Previously Amended) The collaboration hub of claim 8 wherein said business logic plug-ins

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include a RosettaNet plug-in.

10. (Canceled).

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11. (Currently Amended) A method for transferring messages of conversations between participants in a collaboration system, comprising the steps of:

receiving messages via a transport from participants and sending messages to other participants using an extensible data protocol, wherein said extensible data protocol provides an ability to specify both a routing information and a business protocol for that conversation, wherein the routing information is specified by the participant in a header of the extensible data protocol, and wherein the business protocol is specified by the URL used by the participant to communicate with the transport;

decoding messages received from the participants using a decoder;

validating messages received at the transport by a router, including examining the message the routing information to determine which other participant or participants the message should be delivered to:

storing messages by the router for delivery by the transport;

scheduling the flow of messages from the transport to the router and further scheduling messages from the router to the transport;

managing the flow of messages across components of collaboration hub, wherein said components comprise the transport, the router and the scheduler; [[and,]]

storing management data in a repository, wherein said management data is used by components of the collaboration hub to handle said messages; and

wherein support for an additional business protocol can be plugged into the collaboration hub, by specifying the uniform resource locator to be used with the additional business protocol, and the decoder that the additional business protocol will use to decode messages.

- 12. (Canceled).
- 13. (Currently Amended) The method of claim 11 further comprising the step of decoding messages received from participants by a decoder, wherein the decoder is plugged between the transport and the scheduler using a plurality of decoders, wherein each particular business protocol

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specifies which one or more of the plurality of decoders are to be used with that particular business

protocol.

14. (Previously Amended) The method of claim 11 further comprising the step of encoding

messages sent to said other participants, wherein the encoder is plugged between the scheduler

and the transport.

15. (Previously Amended) The method of claim 11 further comprising the step of determining

participants to whom messages should be sent by using router logic plug-ins, wherein router logic

plug-ins are plugged between the scheduler and router.

16. (Previously Amended) The method of claim 11 further comprising the step of determining

whether to send a message to said other participants by using filter logic plug-ins, wherein said filter

logic plug-ins are plugged in between the router and the scheduler.

17. (Canceled).

18. (Previously Amended) The method of claim 11 further comprising the step of providing

support for messages of various business protocols among participants by using business logic

plug-ins, wherein said business logic plug-ins are plugged in between the scheduler and the router.

19. (Previously Amended) The method of claim 18 wherein said messages of various business

protocols includes a RosettaNet format message.

20-32. (Canceled).

33. (New) A collaboration hub for use with a collaboration system for handling messages of

conversations among participants, comprising:

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a conversation repository that includes a plurality of collaboration spaces, wherein each

collaboration space stores the messages of a conversation for delivery to and from the participants

as part of that conversation;

a transport for receiving messages from participants and sending messages to other

participants using an extensible data protocol, wherein the extensible data protocol allows a

participant to specify both a routing information, and a business protocol, for the conversation,

including specifying the routing information in a header of the extensible data protocol, and

specifying the business protocol by a uniform resource locator used by the participant to

communicate with the transport;

a plurality of business protocol handlers that may be plugged into the collaboration hub, each

of which are configured to use a different business protocol which may be used by a participant to

participate in a conversation, wherein each collaboration space and business protocol combination

is subsequently identified by a unique uniform resource locator;

a plurality of decoders that translate messages between the different business protocols,

wherein each decoder identifies the protocol-specific headers in the messages and then assigns

the message to the appropriate business protocol handler; and

a manager that manages a conversation within one of the plurality of collaboration spaces,

including registering participants in the conversation by allowing a participant using a particular

business protocol to access a collaboration space and the conversation therein using the unique

uniform resource locator assigned to that collaboration space and protocol combination.

34. (New) The collaboration hub of claim 33, wherein each business protocol specifies which

one or more of the plurality of decoders are to be used with that particular business protocol to

translate the message.

35. (New) The collaboration hub of claim 34, wherein the business protocol specifies a chain

of decoders to be used.

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36. (New) The collaboration hub of claim 33, wherein the hub supports the eXtensible Open

Collaboration Protocol.

37. (New) The collaboration hub of claim 33, wherein the hub supports the RosettaNet business

protocol.

38. (New) The collaboration hub of claim 37, wherein the hub supports variations on the

RosettaNet protocol by providing a different uniform resource locator for each variation.

39. (New) A method for managing the flow of messages between participants in a collaboration

system, comprising:

providing a conversation repository that includes a plurality of collaboration spaces, wherein

each collaboration space stores the messages of a conversation for delivery to and from the

participants as part of that conversation;

receiving messages from participants at a transport, and sending messages to other

participants, using an extensible data protocol, wherein the extensible data protocol allows a

participant to specify both a routing information, and a business protocol, for the conversation,

including specifying the routing information in a header of the extensible data protocol, and

specifying the business protocol by a uniform resource locator used by the participant to

communicate with the transport;

accessing a plurality of business protocol handlers that may be plugged into the collaboration

hub, each of which are configured to use a different business protocol which may be used by a

participant to participate in a conversation, wherein each collaboration space and business protocol

combination is subsequently identified by a unique uniform resource locator;

accessing a plurality of decoders that translate messages between the different business

protocols, wherein each decoder identifies the protocol-specific headers in the messages and then

assigns the message to the appropriate business protocol handler; and

managing a conversation within one of the plurality of collaboration spaces, including

registering participants in the conversation by allowing a participant using a particular business

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protocol to access a collaboration space and the conversation therein using the unique uniform

resource locator assigned to that collaboration space and protocol combination.

40. (New) The method of claim 39, wherein each business protocol specifies which one or more

of the plurality of decoders are to be used with that particular business protocol to translate the

message.

41. (New) The method of claim 40, wherein the business protocol specifies a chain of decoders

to be used.

42. (New) The method of claim 39, wherein the transport supports the eXtensible Open

Collaboration Protocol.

43. (New) The method of claim 39, wherein the transport supports the RosettaNet business

protocol.

44. (New) The method of claim 43, wherein the transport supports variations on the RosettaNet

protocol by providing a different uniform resource locator for each variation.

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